

**SINGLE-DISC DESIGN**

After removal of the splash protection ring, the working wheel is freely accessible.

The wheel is automatically arrested when placed on the new mounting system.

On lifting the wheel, all parts below are accessible for easy cleaning.

**RINSING TAP**

By pulling the flexible tube, the tap may be used for rinsing the entire working area and basin.

**SAPHIR 250 M/ECO**

The grinders and polishers of the SAPHIR 250 M and A series are characterized by high-quality, robust manufacture and modern design. Features like the new splash ring, open working area, water tap and slanted control panel ensure safe and convenient operation. The rotational direction of the working

wheel is selected via a switch at the rear of the device.

The innovative mounting system for the working wheel (single disc design) allows for time-saving changing of the grinding and polishing media and cleaning.

The devices are available either as single or twin wheel grinder.

**ERGONOMICALLY FORMED SPLASH RING**

The ergonomically formed splash ring significantly reduces splashing. Due to the recessed grips it is possible to change grinding and polishing media with the ring still in place.

It can also be used as a hand rest during a longer preparation process.

**COMBINATION WITH DOSING UNIT TOPAS**

The dosing unit TOPAS has been adapted to the new design and is now even more user-friendly and robust.

Four 500 ml glass bottles with screw caps hold 3 x suspension and 1 x lubricant or oder 4 x Dia-Complete and can be filled via a separate lid.

They are easily removed for cleaning.

The dosing system TOPAS is available as version M for manual and version ECO for automatic devices.



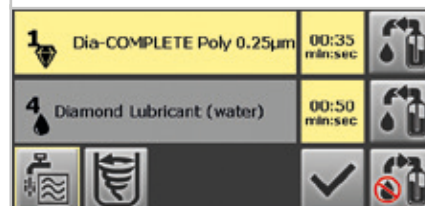


### BOOST FUNCTION

The boost function may be optionally activated and helps to spin dry the grinding and polishing medium at 750 rpm for 3 seconds at the end of the preparation process.

### ELECTRONIC CONTROL

Operation and programming is carried out via the 4.3" touch screen. It is possible to create and store methods for automated sample preparation or to carry out the preparation manually.

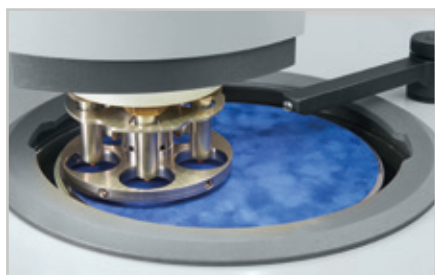


## SAPHIR 250 A1-ECO

The SAPHIR 250 A1-ECO model is an automatic, single wheel grinder and polisher for working wheels with diameters of 200/250 mm. The new mounting system for the working wheel provides full performance without the requirement of a carrier plate. With the new control software entire preparation methods

may be edited and stored, protected by a user account management. Pressure, speed and rotational direction are adjustable.

The robust device may be combined with the dosing system TOPAS ECO and offers maximum reproducibility for sample preparation and operating convenience for the user.



### SAMPLE HOLDER

The sample downforce in single pressure mode is 5 to 80 N, in central pressure mode it is 20 to 350 N.

Up to 5 specimens in a 40 mm diameter can be moved with adjustable speed.

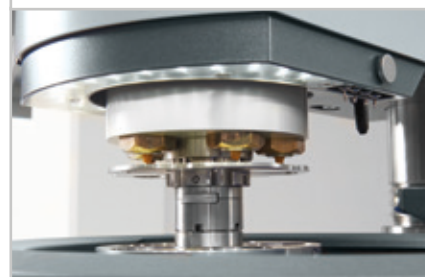


### OPERATING CONVENIENCE

The grinding and polishing head ECO features recessed grips with integrated pushbuttons on both sides for easy swivelling and adjusting. A large distance between the working surface and the polishing head allows a comfortable change of the sample holder.

### POLISHING HEAD ECO

The polishing head ECO is equipped with LED illumination of the working area and a support for the nozzles of the TOPAS ECO dosing system. Water is supplied automatically via the head.



## BASIC MODULE

## SAPHIR 250 A1-ECO



- » Single wheel grinding- and polishing machine including polishing head ECO
- » Single and central pressure
- » Variable speed of working wheel and polishing head
- » Working wheel and polishing head: clockwise/counter-clockwise rotation
- » 4.3" Touch-Screen with intuitive ATM user software
- » 200 customized programs storable
- » Adjustable swiveling stop position of polishing head
- » Economic LED illumination
- » Manual water inlet
- » Automatic water supply on the polishing head
- » Basin rinsing tube
- » Aluminium case, powder coated
- » Impact-proof plastic bowl
- » Incl. splash ring and cover
- » USB plug for data exchange and software updates
- » Ethernet plug for online-diagnostics and user support
- » Easy, fast and tool-free change of working wheel
- » Easy cleaning/rinsing of bowl by lifting the working wheel
- » Spin cycle feature (cleaning Boost)
- » Combinable with dosing unit Topas-Eco
- » 4-times dosing unit Topas-Eco integrable

200-240 V / 50/60 Hz (1Ph/N/PE)

Order No.: M5631040

100-120 V / 50/60 Hz (1Ph/N/PE)

Order No.: M5631045

## ACCESSORIES

## SETTLING TANK



» 2-chamber-compartment, 45 ltr.

» inlet sieve and filter bag

for System lab cabinet  
(insertion mechanism)

referring height of System cabinet

H 800 mm      Order No.: A5810261

H 900 mm      Order No.: A5810237



mobile

Order No.: A5800496

## CONNECTION SET



Order No.: Z5600009

1 drain tube      Ø 40 mm; 1.5 m

1 pressure tube      R 1/2"; 2 m



**WORKING WHEELS SAPHIR 250**

» Single-disc design

Ø 200 mm      Order No.: Z5631001  
 Ø 250 mm      Order No.: Z5631002

**ACCESSORIES****CLAMPING RING SAPHIR 250**

» for working wheels SAPHIR 250 M/A  
 » plastic

Ø 200 mm      Order No.: Z5631003  
 Ø 250 mm      Order No.: Z5631004

**DOSING UNIT TOPAS ECO**

» see page 118/119

**SPECIFICATIONS**

Connected load	2,3 kVA
Power supply	1 200-240 V / 50/60 Hz (1Ph/N/PE)
	2 100-120 V / 50/60 Hz (1Ph/N/PE)
Water inlet	1/2" threaded coupling (max. water pressure: 6 bar)

**SAPHIR 250 A**

Drive power	0.55 kW (S1)
	0.75 kW (S3/40%)
Working wheels	Ø 200/250 mm
Speed	30 – 600 rpm

**POLISHING HEAD ECO**

Drive power	0.18 kW (S1)
Single pressure	1 – 5 samples, max. Ø 40 mm
Central pressure	depending on holder
Speed	30 – 160 rpm

Sample downforce	variable
Single pressure	5 – 80 N
Central pressure	20 – 350 N

WxHxD ~	511 x 265 x 710 mm
Weight	1 64 kg
	2 72 kg

